Name: Rachel Fischhoff Grade: 5 Date:

The Frog-Jumping Contest Day 1

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| Lesson Sources: *The California Frog-Jumping Contest,* Jacob and Fosnot |
| Lesson Objectives: Students will determine the length of three frog’s jumps using skills developed in early lessons (unmarked number lines, equivalence, substitutions, etc). |
| Standards: represent and analyze patterns and functions, using words, tables, and graphs. ?  Apply and adapt a variety of appropriate strategies to solve problems  Recognize and use connections among mathematical ideas |
| Multicultural Content: n/a |
| Materials and Advanced Preparation: Appendix I |
| Prior Knowledge and Skills Needed: familiarity with double number lines and equivalence |
| Key/New Vocabulary: n/a |

Lesson Procedure: Part One

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| **Time** | **Teacher Actions** | **Student Learning Activities** | **Form of Assessment** |
| 1 min | **1. Connection**   * Mathematicians, we are ready to dive into the next part of the Frog Jumping Contest. Now that the jumping areas are all set up, the contest has started, and we need to figure out which of three frog contestants –Sunny, Cal, or Legs—has won. | Explain purpose of mini-lesson | Active listening |
| 10 min max | **2. The Teaching (The Giving of Information):**   * In this competition, the winner is the frog with the longest jump. Like in previous problems, all of the frogs’ steps are of equal length, however, each frog can jump a different distance. We need to know who can jump farthest! * As an added challenge, the frogs occasionally step *backward*, so it will be very important to read the information carefully. * Watch while I use an unmarked number line to understand part of the first problem (read problem, mark one side of number line—but not both sides..) | * Active listening * Watching as I draw the first example | * Active listening * Making simple questioning—how many steps? How many jumps? |
|  | **3. Have-A-Go (optional)**   * Turn and talk to a partner. What could I do next to solve this problem? | * Patner talk | * Listen in to partner talk * Highlight a few partnership’s ideas. |
| **Anticipated Responses/Outcomes:**   * Some students will immediately recall the idea of the double number line from Frog and Toad * Some students may think about guessing and checking | | | |
|  | **4. The Link**   * Today you will work in partnerships to determine which frog has the longest jump and is the winner of the frog-jumping contest! Keep thinking about how you can express your thinking in three ways—visually in pictures or charts, numerically with expressions that include numbers or letters, and written in words. * Today and everyday, think about how previous problems we have looked at can support your thinking. | **(Workshop Time)**   * Students will work on Appendix I worksheets in patnerships | * Conferring with students * Record what strategies are being employed |
|  | **5. Closing (at the share)**  Closing today is a process-check-in/strategy share, because the next day includes a full math congress.  \*\*\*try to ensure that some students begin using a separation/cancellation strategy during Day 1 to prepare for the Math Congress on Day 2\*\*\* | * How do the problems relate to one another? * What strategies are being used? | * Collect and review worksheets. |

**Reflections:**

How did the lesson plan work? What was effective? What did you learn? What would you change for tomorrow or the next time you will use this plan?